Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An inkjet printhead chip that comprises

a substrate that defines a plurality of ink supply channels;

a drive circuitry layer that is positioned on the substrate; and

a plurality of nozzle arrangements that are positioned on the substrate, each nozzle arrangement including

a nozzle chamber defined by the substrate;

a roof structure positioned over the nozzle chamber, the roof structure defining an ink ejection port; and

at least one actuator that is positioned in the roof structure ~~and is~~, the at least one actuator being arranged so as to be displaceable ~~with respect to~~towards the substrate ~~on~~ upon receipt of an electrical current from the drive circuitry layer so as to reduce a volume of the nozzle chamber and be displaceable back to its original position upon cessation of the electrical current so that ink is ejected from the ink ejection port.

2. (Original) An inkjet printhead chip as claimed in claim 1, in which a number of actuators are positioned in each roof structure about the ink ejection port.

3. (Original) An inkjet printhead chip as claimed in claim 2, in which each actuator includes an actuator arm that is connected to the drive circuitry layer and extends towards the ink ejection port, a heating circuit being embedded in the actuator arm to receive the electrical signal from the drive circuitry layer, the actuator arm being of a material that has a coefficient of thermal expansion sufficient to permit the material to perform work as a result of thermal expansion and contraction, the heating circuit being positioned so that the actuator arm is subjected to differential thermal expansion and contraction to displace the actuator arm towards and away from the respective ink supply channel.

4. (Original) An inkjet printhead chip as claimed in claim 3, in which each actuator arm is of polytetrafluoroethylene while each heating circuit is one of the materials in a group including gold and copper.

5. (Original) An inkjet printhead chip as claimed in claim 3, in which each actuator arm includes an actuating portion that is connected to the drive circuitry layer and an ink

displacement member that is positioned on the actuating portion to extend towards the ink ejection port.

6. (Original) An inkjet printhead chip as claimed in claim 3, in which each roof structure includes a rim that defines the ink ejection port, the rim being supported above the respective ink inlet channel with support arms that extend from the rim to the drive circuitry layer, the actuator arms being interposed between consecutive support arms.

7. (Original) An inkjet printhead chip as claimed in claim 1, in which the drive circuitry layer is a CMOS layer.

8. (New) An inkjet printhead chip that comprises

a substrate that defines a plurality of ink supply channels;

a drive circuitry layer that is positioned on the substrate; and

a plurality of nozzle arrangements that are positioned on the substrate, each nozzle arrangement including

a nozzle chamber defined by the substrate for holding ink from at least one of the ink supply channels;

a roof structure positioned over the nozzle chamber, the roof structure defining an ink ejection port; and

a plurality of actuators positioned in the roof structure about the ink ejection port, each actuator displaceable with respect to the substrate on receipt of an electrical current from the drive circuitry layer to reduce a volume of the nozzle chamber so that ink is ejected from the ink ejection port.

9. (New) An inkjet printhead chip as claimed in claim 8, in which each actuator includes an actuator arm that is connected to the drive circuitry layer and extends towards the ink ejection port, a heating circuit being embedded in the actuator arm to receive the electrical signal from the drive circuitry layer, the actuator arm being of a material that has a coefficient of thermal expansion sufficient to permit the material to perform work as a result of thermal expansion and contraction, the heating circuit being positioned so that the actuator arm is subjected to differential thermal expansion and contraction to displace the actuator arm towards and away from the respective ink supply channel.

10. (New) An inkjet printhead chip as claimed in claim 9, in which each actuator arm is of polytetrafluoroethylene while each heating circuit is one of the materials in a group including gold and copper.

11. (New) An inkjet printhead chip as claimed in claim 9, in which each actuator arm includes an actuating portion that is connected to the drive circuitry layer and an ink

displacement member that is positioned on the actuating portion to extend towards the ink ejection port.

12. (New) An inkjet printhead chip as claimed in claim 9, in which each roof structure includes a rim that defines the ink ejection port, the rim being supported above the respective ink inlet channel with support arms that extend from the rim to the drive circuitry layer, the actuator arms being interposed between consecutive support arms.

13. (New) An inkjet printhead chip as claimed in claim 8, in which the drive circuitry layer is a CMOS layer.